

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0047341; AI 42245; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Lakeshore Subdivision Sewerage District #1  
Lakeshore Subdivision Wastewater Treatment Facility  
P.O. Box 7259  
Monroe, LA 71211
- II. PREPARED BY:** Rachel Davis
- DATE PREPARED:** April 13, 2010
- III. PERMIT ACTION:** reissue LPDES permit LA0047341, AI 42245; PER20090001
- LPDES application received: July 31, 2009  
LPDES application was administratively complete: October 29, 2009
- EPA has not retained enforcement authority.
- LPDES permit issued: July 1, 2004  
LPDES permit expired: June 30, 2009

## **IV. FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Lakeshore Subdivision and 25 small businesses.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on the end of McGowan Road Extension in Monroe, Ouachita Parish.
- D. The treatment facility consists of a three cell oxidation pond and marsh with UV disinfection.
- E. Outfall 001

Discharge Location: Latitude 32° 33' 12" North  
Longitude 92° 0' 10" West

Description: treated sanitary wastewater

Expected Flow: 1,200 homes x 400 GPD = 0.48 MGD  
275 employees x 20 GPD = 0.0055 MGD  
950 students x 15 GPD = 0.01425 MGD  
75 seats x 40 GPD = 0.003 MGD  
100 Seats x 35 GPD = 0.0035 MGD\*

\*To determine the expected flow of the 25 small businesses, information from the previous statement of basis (EDMS Doc ID#31382249) was utilized.

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Total Expected Flow: 0.5625 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using:  
Continuous Recorder

**V. RECEIVING WATERS:**

The discharge is into Caney Creek, thence into Patrick Bayou in segment 080904 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in the table below<sup>1/</sup>.

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 080904 of the Ouachita River Basin, is not listed in Section II 2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:**

Subsegment 080904, Bayou Lafourche- Near Oakridge to Boeuf River near Columbia, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 080904 was previously listed as impaired for organic enrichment/low DO, priority organics (including Dioxins), nutrients, suspended solids/turbidity, and phosphorus for which the below TMDL's have been developed.

The following TMDL's have been established for subsegment 080904:

TMDL for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL, "Point sources do not represent a significant source of TSS as defined in this TMDL. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids no limitations are required for these materials." Therefore TSS limits will be permitted according to current state water quality policy.

Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients

Twenty-four point sources were identified in subsegment 080904. Of those point sources, only four were considered large enough to be modeled in the TMDL. This facility, however, was not one of the twenty-four point sources considered. The facility discharges into Caney Creek; thence into Patrick Bayou. The effluent will travel almost ten miles before reaching Bayou Lafourche. Because the facility did exist at the time of the TMDL yet was not modeled specifically and due to the distance from the discharge point to Bayou Lafourche, limitations to address dissolved oxygen and nutrients will be based on the Water Quality Management Plan, Statewide Sanitary Effluent Limitations Policy.

Dioxin TMDL for Tisdale Brake, Staulkinghead Creek, Little Bayou Boeuf, Wham Brake and Bayou Lafourche

The only identified point source pollutant loading of Dioxin is the discharge into Staulkinghead Creek from IP's Louisiana mill (NPDES permit number LA0007561). Therefore, no limitations for priority organics will be required of this facility.

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## OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	47	10 mg/l	15 mg/l	Based on the <u>Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients</u> and the SSEL
TSS	70	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

## Other Effluent Limitations:

## 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

## 2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

## 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0047341: Issued: July 1, 2004  
Expired: June 30, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	1/week	3 Hr Comp
TSS	15 mg/l	23 mg/l	1/week	3 Hr Comp
Fecal Coliform Colonies	200	400	1/week	Grab
pH	6 su	9 su	1/week	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

Below is the most recent inspection performed during the period beginning **June 2007** and ending **June 2009** for this facility.

Facility Inspection, June 4, 2008, EDMS Document No. 37103325.

1. Strong odors were present at the location
2. The facility had excursions on BOD & TSS
3. The owner stated that two aerators will be placed in the main cell. At the present time an engineer is drawing up plans for the facility.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no compliance orders have been issued against the facility in the past two years.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning **June 2007** through **June 2009** has revealed the following violations:

<u>Period of Excursion</u>	<u>Outfall</u>	<u>Parameter</u>	<u>Permit Limit</u>	<u>Reported Quantity</u>
June 2007	001	BOD	10 mg/l	18 mg/l
		BOD	15 mg/l	29.2 mg/l
		TSS	15 mg/l	24.2 mg/l
		TSS	23 mg/l	38 mg/l
		Fecal	400	1760
July 2007	001	BOD	10 mg/l	27.2 mg/l
		BOD	15 mg/l	47 mg/l
		TSS	15 mg/l	24 mg/l
		TSS	23 mg/l	34 mg/l
		Fecal	200	3099
August 2007	001	Fecal	400	19,840
		BOD	10 mg/l	20.8 mg/l
		BOD	15 mg/l	23.4 mg/l
		TSS	15 mg/l	17 mg/l
		TSS	23 mg/l	26 mg/l

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		Fecal Fecal	200 400	327 1,680
September 2007	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	14.6 mg/l 17.9 mg/l 16 mg/l 24 mg/l
October 2007	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	15.9 mg/l 23.8 mg/l 32.6 mg/l 63 mg/l
November 2007	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	16.9 mg/l 24.2 mg/l 25.4 mg/l 45 mg/l
December 2007	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	40.5 mg/l 42.7 mg/l 18 mg/l 50 mg/l
January 2008	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	23.1 mg/l 54 mg/l 42.6 mg/l 85 mg/l
February 2008	001	TSS TSS	15 mg/l 23 mg/l	43.6 mg/l 134 mg/l
March 2008	001	TSS TSS	15 mg/l 23 mg/l	35 mg/l 68 mg/l
April 2008	001	TSS TSS	15 mg/l 23 mg/l	23.8 mg/l 64 mg/l
May 2008	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	42.2 mg/l 148 mg/l 20.4 mg/l 33 mg/l
June 2008	001	BOD BOD Fecal	10 mg/l 15 mg/l 400	12.5 mg/l 25.5 mg/l 700
August 2008	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	33.5 mg/l 78.3 mg/l 58.2 mg/l 124 mg/l
September 2008	001	BOD BOD TSS TSS Fecal	10 mg/l 15 mg/l 15 mg/l 23 mg/l 400	13.9 mg/l 17.9 mg/l 32.5 mg/l 85 mg/l 880
October 2008	001	TSS TSS	15 mg/l 23 mg/l	32.4 mg/l 66 mg/l
November 2008	001	TSS TSS	15 mg/l 23 mg/l	27.8 mg/l 53 mg/l
December 2008	001	BOD BOD TSS TSS	10 mg/l 15 mg/l 15 mg/l 23 mg/l	13.9 mg/l 26.5 mg/l 53 mg/l 80 mg/l
January 2009	001	BOD BOD	10 mg/l 15 mg/l	11.7 mg/l 16.2 mg/l

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		TSS	15 mg/l	59.2 mg/l
		TSS	23 mg/l	113 mg/l
February 2009	001	BOD	10 mg/l	15.8 mg/l
		BOD	15 mg/l	22.4 mg/l
		TSS	15 mg/l	44 mg/l
		TSS	23 mg/l	86 mg/l

**D) Permit Actions Taken**

- Based on the information gathered during the compliance review, this facility was referred to the Enforcement division on April 13, 2010.

**XII. ADDITIONAL INFORMATION:**

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.5625 MGD.

Effluent loadings are calculated using the following example:

BOD:  $8.34 \text{ lb/gal} \times 0.5625 \text{ MGD} \times 10 \text{ mg/l} = 40 \text{ lb/day}$

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At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.5 and 1.0 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	1/week	3 Hr. Composite
Total Suspended Solids	1/week	3 Hr. Composite
Fecal Coliform Bacteria	1/week	Grab
pH	1/week	Grab

Pretreatment Requirements

Due to the absence of pretreatment categorical standards for the indirect discharges listed above or the discharge is of sanitary wastewater only, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0047341.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Lakeshore Subdivision Sewerage District #1, Lakeshore Subdivision Wastewater Treatment Facility, October 29, 2009.